

CLAIMS:

1. Apparatus for displaying images represented by electronic image information, comprising:

a light source;

a reflective light modulator for optically modulating, with said image information, light from said light source to obtain a diffraction pattern that depends on said image information;

an optical system for converting said diffraction pattern into an image; and

projection optics for projecting the image obtained with said optical system;

said optical system including an array of schlieren bars and a focusing reflector.

2. Apparatus as defined by claim 1, wherein said focusing reflector is a parabolic reflector.

3. Apparatus as defined by claim 1, wherein said schlieren bars and focusing reflector are arranged such that the path of light from said light source comprises reflection from said schlieren bars to said focusing reflector and reflective light modulator and then again to said focusing reflector and then through said schlieren bars to said projection optics.

4. Apparatus as defined by claim 2, wherein said schlieren bars and focusing reflector are arranged such that the path of light from said light source comprises reflection from said schlieren bars to said focusing reflector and reflective light modulator and then again to said focusing reflector and then through said schlieren bars to said projection optics.

5. Apparatus as defined by claim 1, wherein said optical system includes a further array of schlieren bars.

6. Apparatus as defined by claim 2, wherein said optical system includes a further array of schlieren bars.

7. Apparatus as defined by claim 6, wherein said array of schlieren bars and said further array of schlieren bars are both transmissive.

8. Apparatus as defined by claim 8, wherein at least one of said arrays of schlieren bars includes two portions having bars oriented in respectively different directions.

9. Apparatus as defined by claim 8, wherein said respectively different directions are orthogonal directions.

10. Apparatus as defined by claim 8, further comprising complementary color dichroic mirror sections provided in conjunction with

said respective portions of said at least one array of schlieren bars.

11. Apparatus as defined by claim 9, further comprising complementary color dichroic mirror sections provided in conjunction with said respective portions of said at least one array of schlieren bars.

12. Apparatus for displaying color images represented by electronic image information, comprising:

a light source;

a plurality of light modulators for optically modulating, with said image information, light from said light source to obtain diffraction patterns that depend on color components said image information;

an optical system for converting said diffraction patterns into a color image; and

projection optics for projecting the image obtained with said optical system;

said optical system including an array of schlieren bars that includes two portions having bars oriented in respectively different directions.

13. Apparatus as defined by claim 10, wherein said respectively different directions are orthogonal directions.

14. Apparatus as defined by claim 12, further comprising

complementary color dichroic mirror sections provided in conjunction with said respective portions of said at least one array of schlieren bars.

15. Apparatus as defined by claim 13, further comprising complementary color dichroic mirror sections provided in conjunction with said respective portions of said at least one array of schlieren bars.

16. A method for displaying images represented by electronic image information, comprising the steps of:

providing a light source;

providing a reflective light modulator for optically modulating, with said image information, light from said light source to obtain a diffraction pattern that depends on said image information;

providing an optical system for converting said diffraction pattern into an image; and

projecting the image obtained with said optical system;

said step of providing an optical system including providing an array of schlieren bars and a focusing reflector.

17. The method as defined by claim 16, wherein said step of providing a focusing reflector comprises providing a parabolic reflector.

18. The method as defined by claim 16, further comprising arranging said schlieren bars and focusing reflector such that the path of

light from said light source comprises reflection from said schlieren bars to said focusing reflector and reflective light modulator and then again to said focusing reflector and then through said schlieren bars to projection.

19. The method as defined by claim 17, further comprising arranging said schlieren bars and focusing reflector such that the path of light from said light source comprises reflection from said schlieren bars to said focusing reflector and reflective light modulator and then again to said focusing reflector and then through said schlieren bars to projection.